

List of Deliverables for Arrow Chameleon Board

Rev: January 16, 2017 11:30am

1. Quick start guide: a PDF that incorporates a discussion for both Ironwood and WalnutDSA, and that gives package contents, requirements, and instructions for running the demo.
2. C source code that runs on the Cyclone V's ARM Cortex-A9 hard processor system. The Ironwood Key Agreement Protocol is implemented partially in software on the ARM Cortex-A9 and partially in the Cyclone V's FPGA fabric. All of the compute-intensive routines are executed in hardware (in the FPGA fabric). There will be two C source code deliverables, 1. The code that runs the combined WalnutDSA/Ironwood demo, 2. A more generalized version the customers would use for their own production applications with hooks for a SecureRF-specified DMA IP block.
3. Sample WalnutDSA signature plus Ironwood keys included in C header file of demo app.
4. Verilog RTL for Ironwood core implementation, in Qsys-compatible obfuscated Verlog RTL.
5. Layout and timing constraint files.
6. Testbench simulation system for Modelsim-Altera Edition with test vectors.
7. Chameleon FPGA board image with SecureRF's Ironwood/Walnut demo incorporated.